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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,630	11/12/2003	Qiang Wu	010116C1	2190

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QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER
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WONG, BLANCHE

ART UNIT	PAPER NUMBER
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2616

NOTIFICATION DATE	DELIVERY MODE
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07/03/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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kaskanla@qualcomm.com  
nanm@qualcomm.com

## Office Action Summary

Application No.

10/712,630

Applicant(s)

WU ET AL.

Examiner

Blanche Wong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>Nov03</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it is unclear from the abstract what is the invention. Contributing to the unclear nature of the abstract, for example, the abstract uses abbreviation that was undefined in the abstract. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the an access terminal comprising: a signal level estimator, a comparator to determine the differences between a plurality of signal levels received from a plurality of active sectors and a signal level of a current serving sector, a comparator for receiving adjusted signal levels to determine differences, an accumulator, a credit authorization module, and a new sector identification module (claim 1); a best sector identifier (claim 2); and an RPC filter (claim 4) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2616

4. **Claims 1-4** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With regard to claim 1, it is unclear what is the structure of the access terminal and how the individual pieces, namely a signal level estimator, a comparator to determine the differences between a plurality of signal levels received from a plurality of active sectors and a signal level of a current serving sector, a comparator for receiving adjusted signal levels to determine differences, an accumulator, a credit authorization module, and a new sector identification module, are combined to select a best serving sector.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-4** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, line 8, it is unclear how an accumulator apply a hysteresis and what is the hysteresis.

With regard to claim 4, line 1, it is unclear what is RPC.

With regard to claim 3, line 1, it is unclear how the transmission mode identifies when the transmission mode is an output of the best sector identifier in claim 2 and not a device of some sort.

With regard to claim 4, line 2, it is unclear how the deduction works.

7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, line 9, "accumulated total credits".

Claim 1, line 11, "highest soft key".

Claim 1, line 11, "candidate sectors".

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesh et al. (U.S. Pat No. 6,360,098).

With regard to claim 1, Ganesh discloses

a signal level estimator (**mobile station 32, col. 5, line 44**) to deduct an offset value (**a phase reference, col. 5, line 48**) from a fixed rate signal level of the current serving sector to generate an adjusted fixed rate signal level for all sectors;

a comparator (**comparisons**) to determine differences between a plurality of signal levels (**signal strength**) received from a plurality of active sectors (**base**

Art Unit: 2616

**stations) and a signal level of a current serving sector (signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50);**

a comparator (**comparisons**) for receiving adjusted signal levels to determine differences (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**);

an accumulator to apply a hysteresis (**it would have been obvious that all transmission have delays**) during an accumulation and provides accumulated total credits to a credit authorization module; and

a new sector identification module to receive the accumulated total credits (**optimum list**) (**a neighbor list representing an "optimum" list for each sector, col. 6, line 54**) and selects the sector (**determining when to hand off**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**) with the highest soft key among a pool of candidate sectors (**a neighbor lists, col. 6, line 35**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include handoff to the sector with the strongest signal level with Ganesh in order to maintain seamless communication.

With regard to claim 2, Ganesh further discloses a best sector identifier (**determining when to hand off**) (**signal strength comparisons between base stations for determining when to hand off, col. 5, lines 49-50**).

With regard to claim 3, Ganesh further discloses variable rate (**variable rate, col. 1, line 33**).

***Allowable Subject Matter***

10. Claim 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*BW*

BW  
June 24, 2007

Daniel J. Ryman  
Patent Examiner  
AU 2616

*Daniel Ryman*